



**Class-IX**

**Holiday  
Home  
work  
(2026-27)**

**SUMMER**





- निर्देश:
- कार्य साफ एवं सुंदर लिखावट में करें
- समस्त कार्य A4 साइज शीट पर हो
- मुख्य पृष्ठ कलात्मक एवं उसपर छात्र का विवरण हो
- कार्य समय पर जमा करना अनिवार्य है
- 1. प्रेमचंद और रैदास के व्यक्तित्व एवं कृतित्व पर प्रकाश डालते हुए उनकी एक-एक कृति का वर्णन कीजिए
- 2. वन्यजीवों का संरक्षण अथवा शिक्षा का महत्व के विषय पर 120 शब्दों में एक अनुच्छेद लिखिए
- 3. बुरी संगति का प्रभाव अथवा सत्य की जीत विषय में से किसी एक पर 80 से 100 शब्दों में लघु कथा लिखिए
- 4. प्रतिदिन एक पृष्ठ हिंदी पुस्तक का पठन करें



- लघु संस्कृत पुस्तिका बनाइएइस कार्य के अंतर्गत आप निम्नलिखित तैयार करें—
  - एक कहानी लिखें (संस्कृत में)
  - 5 श्लोक लिखें अर्थ सहित |
  - एक चित्र वर्णन 5 वाक्य के साथ (संस्कृत में)



- **(1)** Place Reiaan's rectangular study table with three of its feet at the points  $(8, 9)$ ,  $(11, 9)$  and  $(11, 7)$ .
- (i) Where will the fourth foot of the table be?
- (ii) Is this a good spot for the table?
- (iii) What is the width of the table? The length? Can you make out the height of the table?
- **(2)** Use the connection you found to find the coordinates of B given that M  $(-7, 1)$  is the midpoint of A  $(3, -4)$  and B  $(x, y)$ .
- **(3)**. Let P, Q be points of trisection of AB, with P closer to A, and Q closer to B. Using your knowledge of how to find the coordinates of the midpoint of a segment, how would you find the coordinates of P and Q? Do this for the case when the points are A  $(4, 7)$  and B  $(16, -2)$ .
- **(4)**. (i) Given the points A  $(1, 8)$ , B  $(-4, 7)$  and C  $(-7, -4)$ , show that they lie on a circle K whose center is the origin O  $(0, 0)$ . What is the radius of circle K?
- (ii) Given the points D  $(-5, 6)$  and E  $(0, 9)$ , check whether D and E lie within the circle, on the circle, or outside the circle K.
- **(5)**. The midpoints of the sides of triangle ABC are the points D, E, and F. Given that the coordinates of D, E, and F are  $(5, 1)$ ,  $(6, 5)$ , and  $(0, 3)$ , respectively, find the coordinates of A, B and C.
- **(6)**. Plot the points A  $(2, 1)$ , B  $(-1, 2)$ , C  $(-2, -1)$ , and D  $(1, -2)$  in the coordinate plane. Is ABCD a square? Can you explain why? What is the area of this square?

**(B). Write down the following activity in Mathematics lab manual**

**(1)ACTIVITY:** To construct a square-root spiral.

**(2)ACTIVITY:** To represent some irrational numbers on number line

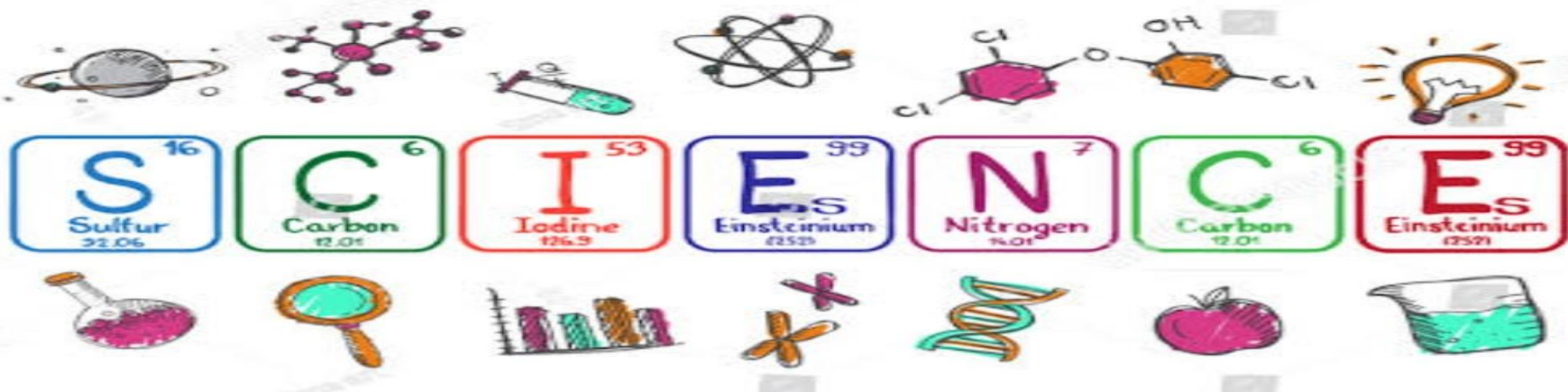
**(3)ACTIVITY:** To verify the algebraic identity :  $(a+b+c)^2 = a^2 + b^2 + c^2 + 2ab + 2bc + 2ca$

**(4)ACTIVITY:** To verify the algebraic identity :  $(a+b)^3 = a^3 + b^3 + 3a^2b + 3ab^2$

**(5)ACTIVITY:** To verify the algebraic identity:  $(a - b)^3 = a^3 - b^3 - 3(a - b)ab$

**(6)ACTIVITY:** To verify the algebraic identity :  $a^3 + b^3 = (a + b) (a^2 - ab + b^2)$

**(7)ACTIVITY:** To verify the algebraic identity :  $a^3 - b^3 = (a - b)(a^2 + ab + b^2)$



- [ PHYSICS ]

- 1. Verification of the laws of reflection of sound.
- 2. Determination of the density of a solid ( denser than water) by using a spring balance and a measuring cylinder.
- 3. Establishing the relation between the loss in weight of a solid when fully immersed in:-i. Tap waterii. Strongly salty water with the weight of water displaced by it by taking at least two different solids.
- 4. Determination of the speed of a pulse propagated through a stretched string/ slinky

# Chemistry

1. Preparation of: \*True solution using sugar and salt

\*Suspension using

Soil and sand

\*Colloidal solution.

using milk and starch

Study their transparency, filtration and stability.

2. Mixtures Vs Compounds

Preparation of a mixture and a compound using iron filings and sulphur powder.

Distinguish them by appearance, magnetic properties, behaviour with carbon disulphide and heating.

Make diagrams to support your work.

All work should be done in lab manual and it should be neat and tidy.

# Biology

## 1 . Microscope Observation:

Onion Peel Cells: Preparing a temporary mount of onion peel using safranin and observing cell walls and nuclei.

2. Plant Tissues: Identifying parenchyma, collenchyma, and sclerenchyma through permanent slides.

Animal Tissues: Identifying striped (striated), smooth, and cardiac muscle fibers, and nerve cells (neurons) through permanent slides.

3 . Diffusion: Observing the diffusion of potassium permanganate in water.

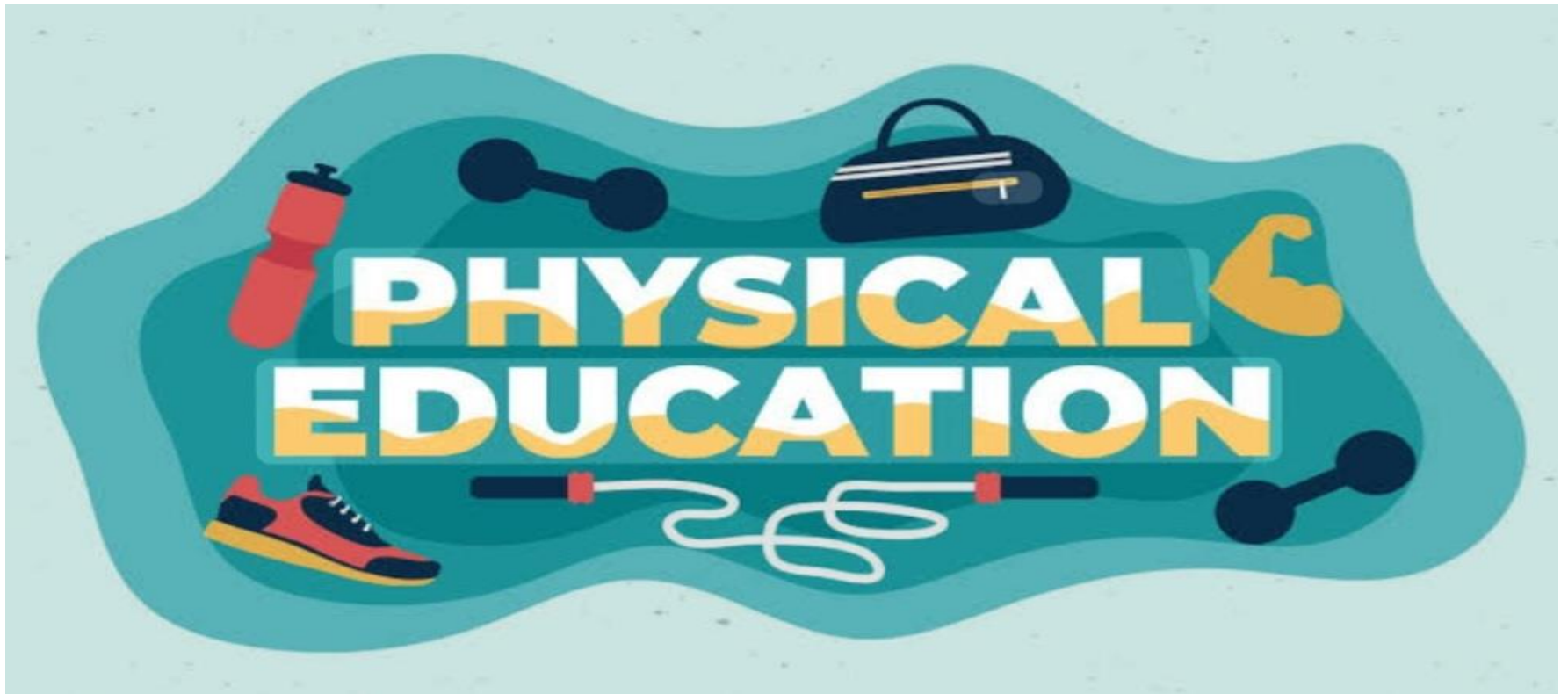
Osmosis/Plasmolysis: Demonstrating plasmolysis in Rhoeo leaf cells or plant cells using high salt concentrations.



- The Preamble Analysis:
- Creatively rewrite and explain the 7 core pillars of the Indian preamble (Sovereign, Socialist Secular, Democratic, Republic Liberty, Equality, Fraternity) with pictures.
- Note:-Prepare a file of 7 pages with cover page)

# Artificial Intelligence

- 1. List of AI applications and use of it in your day to day life. Complete this assignment in your AI notebook.



Detail information about Olympic games.  
history ,modern & ancient olympic games etc.